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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):

Ivan J. Baiges

Confirmation No.: 2301

Application No.: 10/057,619

Examiner: Blaise L. Mouttet

Filing Date:

Jan. 24, 2002

Group Art Unit: 2853

Title:

INKJET PRINTING SYSTEM EMPLOYING MULTIPLE INKJET PRINTHEADS AND

METHOD OF PERFORMING A PRINTING OPERATION

Mail Stop Appeal Brief-Patents **Commissioner for Patents** PO Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

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Transmitted herewith in triplicate is the Reply Brief with respect to the Examiner's Answer mailed 11/1/2004 . This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an

expressly stated new grounds of rejection.)

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Respectfully submitted,

Ivan J. Baiges.

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N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Ivan J. Baiges

Examiner: Blaise L. Mouttet

rial No.:

10/057,619

Group Art Unit: 2853

Filed:

January 24, 2002

Docket No.: 10017070-1

Title:

INKJET PRINTING SYSTEM EMPLOYING MULTIPLE INKJET

PRINTHEADS AND METHOD OF PERFORMING A PRINTING

OPERATION

REPLY BRIEF TO EXAMINER'S ANSWER BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Box AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir/Madam:

APPELLANT'S REPLY BRIEF

This Reply Brief is presented in response to the Examiner's Answer mailed November 1, 2004, and in support of the Notice of Appeal filed on August 5, 2004, from the Final Office Action mailed April 7, 2004, rejecting claims 1-19 and 21-44 of the aboveidentified application.

At any time during the pendency of this application, please charge any fees required or credit any overpayment due to Deposit Account No. 08-2025 pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees required to Deposit Account No. 08-2025 under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Appellant respectfully requests reversal of the Examiner's rejection of pending claims 1-19 and 21-44.

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Title: INKJET PRINTING SYSTEM EMPLOYING MULTIPLE INKJET PRINTHEADS AND METHOD OF

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ARGUMENT

Related Appeals And Interferences

Contrary to the Examiner's contention that the Appeal Brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal, Appellant submits that such a statement is presented on page 3 of the Appeal Brief.

Regardless, Appellant submits that there are no related appeals or interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal.

Reply to Examiner's Response to Argument

As previously outlined, the printing system of independent claim 1 includes, amongst other things, a first marking engine for depositing a first marking fluid only on a first portion of a first side of the print media, and a second marking engine for depositing a second marking fluid only on a second portion of the first side of the print media, and the printing system of independent claim 19 includes, amongst other things, a first mechanism for moving a first printhead assembly relative to the print media, and a second mechanism, separate from the first mechanism, for moving a second printhead assembly, separate from the first printhead assembly, relative to the print media. In addition, the method of independent claim 30 includes, amongst other things, providing a first movable printhead assembly for depositing ink on the print media, and providing a second movable printhead assembly for depositing ink on the print media, and the system of independent claim 44 includes, amongst other things, means for moving across the print media along a first direction and depositing a first marking fluid only on a first portion of a first side of the print media, and means for moving across the print media along the first direction and depositing a second marking fluid only on a second portion of the first side of the print media.

As such, each of the independent claims of the present invention recite either a first marking engine and a second marking engine, a first printhead assembly and a second printhead assembly, a first movable printhead assembly and a second movable printhead assembly, or means for depositing a first marking fluid and means for depositing a second

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marking fluid. Accordingly, the Examiner contends that recording heads 31A and 31B of the Yashima et al. patent constitute a first marking engine and a second marking engine, a first printhead assembly and a second printhead assembly, a first movable printhead assembly and a second movable printhead assembly, and means for depositing a first marking fluid and means for depositing a second marking fluid, respectively.

The only embodiment of the Yashima et al. patent including two recording heads (i.e., recording heads 31A and 31B) is illustrated in Figure 10. For this embodiment, the Yashima et al. patent states that first recording means (i.e., recording head 31A), which has two or more types of recording agents of different densities but of the same color, and second recording means (i.e., recording head 31B), which is situated at a position different from a position at which the first recording means is situated and has two or more types of recording agents of different densities but of the same color, print "a combination of the recording agents used to record a pixel of the grayscale image that is to be recorded on the recording medium, wherein one or more of the recording agents possessed by each of said first and second recording means is included in the combination" (col. 4, lines 40-65; col. 5, lines 12-37). As such, the Yashima et al. patent discloses that by printing a plurality of inks of different densities "in superposition on the same pixel", the number of tones capable of being expressed can be increased greatly (col. 7, lines 20-23). Thus, to print within the same pixel on a recording medium, the recording heads 31A and 31B of the Yashima et al. patent both must print within the same portion of the recording medium.

Accordingly, Appellant submits that modifying the embodiment illustrated in Figure 10 of the Yashima et al. patent in the manner suggested by the Examiner so that the first movable printhead assembly (i.e., recording head 31A) and the second movable printhead assembly (i.e., recording head 31B) deposit ink only on the first and second portions, respectively, without depositing ink on other portions, is contrary to the teaching of the Yashima et al. patent wherein each of the recording heads 31A and 31B prints within the same pixel and, therefore, the same portion of the recording medium. More specifically, modifying the embodiment illustrated in Figure 10 of the Yashima et al. patent in the manner suggested by the Examiner would preclude the recording heads 31A and 31B of the Yashima et al. patent from printing a plurality of inks of different densities in superposition on the same pixel, thereby defeating the intent of this embodiment and rendering the Yashima et al.

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patent unsatisfactory for its intended purpose. Because modifying the Yashima et al. patent by the Granzow patent, in the manner suggested by the Examiner, would render the Yashima et al. patent unsatisfactory for its intended purpose, Appellant submits that there is no suggestion or motivation to make the proposed modification.

In the Examiner's Answer, the Examiner contends that the embodiment illustrated in Figure 20 of the Yashima et al. patent discloses that the different inks used to form the grayscale tones are provided by a single marking engine (Examiner's Answer mailed November 1, 2004, at sect. 11, p. 13). The embodiment illustrated in Figure 20 of the Yashima et al. patent, however, does not include two recording heads. In addition, the Yashima et al. patent does not disclose the teachings of this embodiment as being applicable to a system including two recording heads. Appellant, therefore, submits that the embodiment illustrated in Figure 20 of the Yashima et al. patent does not overcome the shortcomings of the Yashima et al. patent as previously identified.

In the Examiner's Answer, the Examiner contends that claims 1, 19, and 44, and the claims dependent therefrom, are each directed to an apparatus and that the differences relied on to establish patentability lie in the intended use statements of the apparatus (Examiner's Answer mailed November 1, 2004, at sect. 11, p. 13). As such, the Examiner asserts the necessity of apparatus claims as being structurally rather than functionally distinguished from the prior art and cites that a new use of a prior art apparatus does not result in patentability of an apparatus claim (Examiner's Answer mailed November 1, 2004, at sect. 11, p. 13).

Appellant respectfully disagrees with the Examiner's assertion of the necessity of apparatus claims as being structurally rather than functionally distinguished from the prior art as well as the citation that a new use of a prior art apparatus does not result in patentability of an apparatus claim. More specifically, as for the patentable weight to be given to a recitation of a function in a claim, Appellant submits that "a patent applicant is free to recite features of an apparatus either structurally or functionally," *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ 1429, 1432 (Fed. Cir. 1997) and that there is nothing intrinsically wrong in defining something by what it does rather than by what it is. *In re Hallman*, 655 F.2d, 212, 210 USPQ 609 (CCPA 1981). See also *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). In addition, in evaluating a claim, Appellant submits that patentable weight must be given to all claim limitations including functional language. *In re Angstadt*, 537 F.2d 498, 501, 190

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USPQ 214, 217 (CCPA 1976). Furthermore, as for the new use of a known apparatus, Appellant submits that such new use can be patentable if such new use is not disclosed or suggested by the prior art. See *In re Fritch*, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-4 n.14 (Fed. Cir. 1992), citing *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1994) ("The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.").

For the reasons set forth above, as well as the reasons set forth in Appellant's Appeal Brief, Appellant submits that the Examiner has not established a *prima facie* case of obviousness of independent claims 1, 19, 30, and 44, and that independent claims 1, 19, 30, and 44 are each patentably distinct from the Yashima et al. and Granzow patents. As dependent claims 2-18 and 35-37 further define patentably distinct claim 1, dependent claims 21-29 and 38-40 further define patentably distinct claim 19, and dependent claims 31-34 and 41-43 further define patentably distinct claim 30, Appellant submits that dependent claims 2-18 and 35-37, dependent claims 21-29 and 38-40, and dependent claims 31-34 and 41-43 are also patentably distinct from the Yashima et al. and Granzow patents. Appellant respectfully submits that the rejection of claims 1-6, 8-14, 18, 19, 21-28, 30-33, and 35-44 under 35 U.S.C. §103(a) is not correct and should be withdrawn, and that the rejections of claims 7 and 34, claims 15-17, and claim 29 under 35 U.S.C. §103(a) are not correct and should be withdrawn.

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CONCLUSION

For the above reasons, Appellant respectfully submits that the art of record neither anticipates nor renders obvious the claimed invention. Thus, the claimed invention does patentably distinguish over the art of record. Appellant, therefore, respectfully submits that the rejections of pending claims 1-19 and 21-44 be withdrawn and that these claims be allowed.

Any inquiry regarding this Reply Brief should be directed to either Robert D. Wasson at Telephone No. (360) 212-2338, Facsimile No. (858) 655-5859 or Scott A. Lund at Telephone No. (612) 573-2006, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Box AF, Assistant Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this day of December, 2004.

Name: Scott A. Lund